

```

      Set  Items  Description
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? E AU=KRI EG, a?

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Ref  Items  Index-term
E1      5  AU=KRI EG, A. H.
E2      5  AU=KRI EG, A. M
E3      0  *AU=KRI EG, A?
E4      5  AU=KRI EG, ADAM J
E5     10  AU=KRI EG, ADAM J.
E6      2  AU=KRI EG, ADAM JEREMY
E7      1  AU=KRI EG, ADRI AN
E8      2  AU=KRI EG, ADRI AN H
E9      2  AU=KRI EG, AF
E10     3  AU=KRI EG, AH
E11     1  AU=KRI EG, AJ
E12    17  AU=KRI EG, ALEXANDER

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      Enter P or PAGE for more
? S E1-E12

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      5  AU=KRI EG, A. H.
      5  AU=KRI EG, A. M
      0  AU=KRI EG, A?
      5  AU=KRI EG, ADAM J
     10  AU=KRI EG, ADAM J.
      2  AU=KRI EG, ADAM JEREMY
      1  AU=KRI EG, ADRI AN
      2  AU=KRI EG, ADRI AN H
      2  AU=KRI EG, AF
      3  AU=KRI EG, AH
      1  AU=KRI EG, AJ
     17  AU=KRI EG, ALEXANDER

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      S1      53  E1-E12
? S S1 AND AACGTT
      53  S1
     254  AACGTT
      S2      0  S1 AND AACGTT
? E AU=KLI NMAN, D?

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Ref  Items  Index-term
E1     76  AU=KLI NMAN, D. M
E2      3  AU=KLI NMAN, D. M
E3      0  *AU=KLI NMAN, D?
E4      1  AU=KLI NMAN, DEBRA G
E5      1  AU=KLI NMAN, DENI S
E6     29  AU=KLI NMAN, DENNI S
E7     60  AU=KLI NMAN, DENNI S M
E8    200  AU=KLI NMAN, DENNI S M
E9      1  AU=KLI NMAN, DENNI S M
E10     1  AU=KLI NMAN, DENNI S MARC
E11     1  AU=KLI NMAN, DENNI S R.
E12   119  AU=KLI NMAN, DM

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      Enter P or PAGE for more
? S E1-E12

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     76  AU=KLI NMAN, D. M
      3  AU=KLI NMAN, D. M
      0  AU=KLI NMAN, D?
      1  AU=KLI NMAN, DEBRA G
      1  AU=KLI NMAN, DENI S
     29  AU=KLI NMAN, DENNI S
     60  AU=KLI NMAN, DENNI S M

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10789353search.txt

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200 AU=KLINMAN, DENNIS M
1 AU=KLINMAN, DENNIS M
1 AU=KLINMAN, DENNIS MARC
1 AU=KLINMAN, DENNIS R.
119 AU=KLINMAN, DM
S3 491 E1-E12
? S S3 AND (AACGTT)
491 S3
254 AACGTT
S4 0 S3 AND (AACGTT)
? S S3 AND CG
491 S3
80853 CG
S5 0 S3 AND CG
? S S3 AND QpG
491 S3
138112 CPG
S6 227 S3 AND CPG
? rd

```

>>>Duplicate detection is not supported for File 393.

>>>Duplicate detection is not supported for File 391.

>>>Records from unsupported files will be retained in the RD set.

S7 127 RD (unique items)

? t s7/3, k/1-4

>>>KWC option is not available in file(s): 399

7/3, K/1 (Item 1 from file: 6)

DI ALOG(R) File 6: NTIS

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2278440 NTIS Accession Number: ADA417843/ XAB

Rapid Induction of Protective Immunity Against Biotreat Agents Using
CPG-Based Oligonucleotides

(Final addendum rept. 1 Aug 2001-1 Aug 2003)

Klinman, D. M

Department of Health and Human Services, Washington, DC.

Corp. Source Codes: 068119000; 439199

Sep 2003 56p

Languages: English

Journal Announcement: USGRDR0405

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Port Royal Road, Springfield, VA, 22161, USA.

NTIS Prices: PC A05/ MF A01

Rapid Induction of Protective Immunity Against Biotreat Agents Using
CPG-Based Oligonucleotides

Klinman, D. M

This research project examines the ability of synthetic oligonucleotides (ODN) containing immunostimulatory 'QpG motifs' to trigger the innate immune system thereby improving the host's ability to survive infection by biowarfare agents. Additional studies examining the ability of these QpG ODN to act as adjuvants when co-administered with vaccines being developed to prevent infection by biowarfare pathogens are also being pursued. Our initial results showed that QpG ODN protected mice against a variety of bacterial and viral pathogens, including Anthrax, Ebola, Listeria, and Tularemia. When used as vaccine adjuvants, these QpG ODN significantly boost antigen-specific IgG and type 1 cytokine production in both murine and...

... QpG ODN could protect against pathogen challenge in non-human primates and (3) that these QpG ODN could promote the induction of antigen-specific immune responses in non-human primates. Results indicate that QpG ODN need to contain multiple different QpG motifs to stimulate PBMC from diverse human donors. These ODN were found to protect rhesus...

... co-administered vaccines (including AVA, rPA, and HKLV) in macaques. Serum transfer studies indicate that QpG ODN increase the magnitude and rapidity of the protective immune response elicited by vaccines against

... Identifiers: Odn(Oligonucleotides); Qpg oligonucleotide;
Immunoprotection; NTISDODXA

7/3, K/2 (Item 2 from file: 6)
DI ALOG(R) File 6: NTIS
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2218973 NTIS Accession Number: ADA394767/ XAB
Rapid Induction of Protective Immunity Against Bioterror Agents Using
CPG-Based Oligonucleotides
(Final rept. 1 Aug 1998-1 Aug 2001)
Klinman, D. M.
Department of Health and Human Services, Washington, DC.
Corp. Source Codes: 068119000; 439199
Sep 2001 125p
Languages: English
Journal Announcement: USGPR0202
Product reproduced from digital image. Order this product from NTIS by:
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Port Royal Road, Springfield, VA, 22161, USA.
NTIS Prices: PC A07/ MF A02

Rapid Induction of Protective Immunity Against Bioterror Agents Using
CPG-Based Oligonucleotides
Klinman, D. M.
This research project examines the ability of synthetic oligonucleotides
(ODN) containing immunostimulatory 'QpG motifs' to trigger the innate
immune system, thereby improving the host's ability to survive infection by
biowarfare agents. Additional studies examining the ability of these
QpG ODN to act as adjuvants when co-administered with vaccines being
developed to prevent infection by biowarfare pathogens are also being
pursued. Our results indicate that QpG ODN provide protection in mice
against a variety of bacterial and viral pathogens, including Anthrax,
Ebola, Listeria, and Tularemia. A single injection of QpG ODN
provides protection for up to two weeks. The duration of protection can be
extended by repeated ODN injections, or by administering the QpG ODN
encapsulated in cationic stealth liposomes. When used as vaccine adjuvants,
these QpG ODN significantly boost antigen-specific IgG and type 1
cytokine production in both murine and non-human primate models. Two types
of QpG ODN were identified that stimulated cells of the human immune
system K type ODN induced...

7/3, K/3 (Item 3 from file: 6)
DI ALOG(R) File 6: NTIS
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2200937 NTIS Accession Number: ADA390846/ XAB
Rapid Induction of Protective Immunity Against Bioterror Agents Using
Page 3

CPG-Based Oligonucleotides

(Annual rept. 1 Aug 1998-1 Aug 1999)

Klinman, D. M

Department of Health and Human Services, Washington, DC.

Corp. Source Codes: 068119000; 396040

Sep 1999 41p

Languages: English

Journal Announcement: USGRDR0120

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NTIS Prices: PC A04/MF A01

Rapid Induction of Protective Immunity Against Biothreat Agents Using CPG-Based Oligonucleotides

Klinman, D. M

This research project examines the ability of synthetic oligonucleotides (ODN) containing immunostimulatory 'CpG' motifs to trigger the innate immune system thereby improving the host's ability to survive infection by bio warfare agents. Our studies indicate that synthetic ODN expressing CpG motifs protect mice from a variety of bacterial and viral pathogens, including Ebola, *L. monocytogenes*...

... period immediately following infection. Protection persisted for approximately 2 weeks after a single dose of CpG ODN. The duration of protection could be prolonged by repeatedly re-administering the ODN every 2 weeks. We then examined whether CpG ODN would be active on human immune cells. We identified one category of CpG motif that stimulated cell proliferation and the production of IgM, and a second category of CpG motif that stimulated the secretion of IFN γ in vitro. These findings are being actively pursued towards the goal of identifying CpG ODN that will be effective in preventing.

7/3, K/4 (Item 1 from file: 24)
DIALOG(R) File 24: CSA Life Sciences Abstracts
(c) 2009 CSA. All rights reserved.

0003910742 IP ACCESSION NO: 11068372
Inductive and suppressive networks regulate TLR9-dependent gene expression in vivo

Klaschik, S; Tross, D; Klinman, DM
Laboratory of Experimental Immunology, Cancer and Inflammation Program
National Cancer Institute, National Institutes of Health, Building 567,
Room 205, Frederick, MD 21702, USA, [<mailto:klinmand@mail.nih.gov>]

Journal of Leukocyte Biology, v 85, n 5, p 788-795, May 2009
PUBLICATION DATE: 2009

DOCUMENT TYPE: Journal Article

RECORD TYPE: Abstract

LANGUAGE: English

SUMMARY LANGUAGE: English

ISSN: 0741-5400

FILE SEGMENT: Bacteriology Abstracts (Microbiology B); Genetics Abstracts;
Industrial & Applied Microbiology Abstracts (Microbiology A); Immunology Abstracts

Klaschik, S; Tross, D; Klinman, DM

ABSTRACT:

Bacterial DNA expressing unmethylated CpG motifs binds to TLR9, thereby stimulating a broadly protective, innate immune response. Although CpG-mediated signal transduction has been studied, the scope of TLR9-dependent gene expression is incompletely understood. To resolve these issues, mice were treated with immunostimulatory CpG oligonucleotides (ODN) and splenic mRNA levels monitored from 30 min through 3 days by microarray...

...networks responsible for TLR9-mediated gene expression. Current results are the first to establish that CpG-induced stimulation of the innate immune system proceeds in multiple waves over time, and gene...

...mice supports the conclusion that the regulatory networks identified by our bioinformatic analysis accurately identified CpG ODN-driven gene-gene interactions in vivo. Equally important, this work identifies the counter-regulatory mechanisms embedded within the signaling cascade that suppresses the proinflammatory response triggered in vivo by CpG DNA stimulation. Identifying these network interactions provides novel and global insights into the regulation of...

DESCR PTORS: Bioinformatics; CpG islands; Data processing; Gene expression; Gene regulation; Immune response; Immunostimulation; Inflammation; Leukocytes; Oligonucleotides; Signal transduction...
? e au=steinberg, al?

| Ref | Items | Index-term |
|-----|-------|------------------------------------|
| E1 | 14 | AU=STEI NBERG, AG |
| E2 | 1 | AU=STEI NBERG, AL |
| E3 | 0 | *AU=STEI NBERG, AL? |
| E4 | 8 | AU=STEI NBERG, ALAN |
| E5 | 1 | AU=STEI NBERG, ALAN B. |
| E6 | 3 | AU=STEI NBERG, ALAN BRUCE |
| E7 | 1 | AU=STEI NBERG, ALAN GILBERT ROBERT |
| E8 | 1 | AU=STEI NBERG, ALAN J |
| E9 | 1 | AU=STEI NBERG, ALAN L. |
| E10 | 2 | AU=STEI NBERG, ALAN M |
| E11 | 10 | AU=STEI NBERG, ALAN M |
| E12 | 1 | AU=STEI NBERG, ALAN MARTIN |

Enter P or PAGE for more

? s e1-e12

| | |
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| 14 | AU=STEI NBERG, AG |
| 1 | AU=STEI NBERG, AL |
| 0 | AU=STEI NBERG, AL? |
| 8 | AU=STEI NBERG, ALAN |
| 1 | AU=STEI NBERG, ALAN B. |
| 3 | AU=STEI NBERG, ALAN BRUCE |
| 1 | AU=STEI NBERG, ALAN GILBERT ROBERT |
| 1 | AU=STEI NBERG, ALAN J |
| 1 | AU=STEI NBERG, ALAN L. |
| 2 | AU=STEI NBERG, ALAN M |
| 10 | AU=STEI NBERG, ALAN M |
| 1 | AU=STEI NBERG, ALAN MARTIN |

S8 43 E1-E12

? s s8 and aacgtt

| | |
|-----|--------|
| 43 | S8 |
| 254 | AACGTT |

S9 0 S8 AND AACGTT

? s aacgtt and olig?

| | |
|---------|--------|
| 254 | AACGTT |
| 2406792 | OLIG? |

S10 174 AACGTT AND OLIG?

? rd

>>>Duplicate detection is not supported for File 393.

>>>Duplicate detection is not supported for File 391.

>>>Records from unsupported files will be retained in the RD set.

S11 38 RD (unique items)

? t s11/3, k/1-11

>>>KW C option is not available in file(s): 399

11/3, K/1 (Item 1 from file: 5)

DI ALOG(R) File 5: Biosis Previews(R)

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0020364532 BIOSIS NO.: 200800411471

The expression profile of TLR9 mRNA and CpG ODNs immunostimulatory actions in the teleost gilthead seabream points to a major role of lymphocytes

AUTHOR: Questa A (Reprint); Esteban M A; Meseguer J

AUTHOR ADDRESS: Univ Murcia, Fac Biol, Dept Cell Biol and Histol, Fish

Innate Immune Syst Grp, E-30100 Murcia, Spain**Spain

AUTHOR E-MAIL ADDRESS: questa.alberto@uni.es

JOURNAL: Cellular and Molecular Life Sciences 65 (13): p2091-2104 JUL 2008

ITEM IDENTIFIER: doi:10.1007/s00018-008-8146-7

ISSN: 1420-682X

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: The potential effects of synthetic unmethylated oligodeoxynucleotides (ODN) containing CpG motifs, mimicking bacterial DNA, has never been evaluated on the immune response...

...cell-source. To conclude, ODNs containing GACGTT, GTCGTT (optimal for mouse and human, respectively) or AACGTT motifs are the most potent inducers of seabream immunity, whilst the involvement of TLR9 is...

DESCRIPTORS:

CHEMICALS & BIOCHEMICALS: ...oligodeoxynucleotide--

11/3, K/2 (Item 2 from file: 5)

DI ALOG(R) File 5: Biosis Previews(R)

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17222739 BIOSIS NO.: 200300181458

CpG oligodeoxynucleotides activate grass carp (Ctenopharyngodon idellus) macrophages.

AUTHOR: Meng Zhen; Shao Jianzhong (Reprint); Xiang Lixin

AUTHOR ADDRESS: College of Life Sciences, Zhejiang University, Hangzhou, 310012, China**China

AUTHOR E-MAIL ADDRESS: lscshaoj@mail.hz.zj.cn

JOURNAL: Developmental and Comparative Immunology 27 (4): p313-321 April 2003 2003

MEDIUM print

ISSN: 0145-305X

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

CpG oligodeoxynucleotides activate grass carp (Ctenopharyngodon idellus) macrophages.

...ABSTRACT: and natural killer cells can be stimulated directly or indirectly by the bacterial DNA and oligodeoxynucleotides (ODN) containing the QpG motifs (QpG DNA). Using head kidney macrophages of grass carp (Ctenopharyngodon...

...ODN-1826 (GACGTT) and -2006 (GTCGTT) for the mice and humans cells, the ODN-1670 (AACGTT) used in Atlantic salmon, the ODN-D containing two repeats motif of those in 1670...

DESCRIPTORS:

CHEMICALS & BIOCHEMICALS: QpG oligodeoxynucleotides--...

...oligodeoxynucleotides--

11/3, K/3 (Item 3 from file: 5)
 DI ALOG(R) File 5: Biosis Previews(R)
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16447089 BIOSIS NO.: 200200040600

Induction of interleukin-6 and interleukin-12 in bovine B lymphocytes, monocytes, and macrophages by a QpG oligodeoxynucleotide (ODN 2059) containing the GTCGTT motif

AUTHOR: Zhang Yan; Shoda Lisa K M; Brayton Kelly A; Estes D Mark; Palmer Guy H; Brown Wendy C (Reprint)

AUTHOR ADDRESS: Department of Veterinary Microbiology and Pathology, Washington State University, Pullman, WA, 99164-7040, USA**USA

JOURNAL: Journal of Interferon and Cytokine Research 21 (10): p871-881 October, 2001 2001

MEDIUM: print

ISSN: 1079-9907

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

...interleukin-6 and interleukin-12 in bovine B lymphocytes, monocytes, and macrophages by a QpG oligodeoxynucleotide (ODN 2059) containing the GTCGTT motif

ABSTRACT: Bacterial DNA and synthetic oligodeoxynucleotides (ODN) that contain unmethylated QpG dinucleotides flanked by certain bases (QpG ODN) have been shown...

...B cell proliferation at a lower concentration (10 µM) when compared with QpG ODN containing AACGTT or GACGTT motifs active for murine leukocytes. Furthermore, ODN 2059 induced interleukin-6 (IL-6...

DESCRIPTORS:

CHEMICALS & BIOCHEMICALS: QpG oligodeoxynucleotide--

11/3, K/4 (Item 4 from file: 5)
 DI ALOG(R) File 5: Biosis Previews(R)
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16222243 BIOSIS NO.: 200100394082

Immunostimulatory QpG modified plasmid DNA enhances IL-12, TNF-α, and NO production by bovine macrophages

AUTHOR: Shoda Lisa K M; Kegerreis Kimberly A; Suarez Carlos E; Mwangi Wai thaka; Knowles Donald P; Brown Wendy C (Reprint)

AUTHOR ADDRESS: Department of Veterinary Microbiology and Pathology, Washington State University, Pullman, WA, 99164-7040, USA**USA

JOURNAL: Journal of Leukocyte Biology 70 (1): p103-112 July, 2001 2001

MEDIUM print
ISSN: 0741-5400
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

... ABSTRACT: cells. In mice, modification of immunostimulatory sequences (ISSs), including CpG motifs, in pDNA vectors or oligodeoxynucleotides can increase or decrease their adjuvant properties. ISSs that stimulate optimal responses reportedly differ for murine and human leukocytes. We have previously characterized the mitogenic properties of oligodeoxynucleotides containing one AACGTT motif for bovine B lymphocytes. We now define cytokine responses by macrophages stimulated with pDNA engineered to contain an ISS comprising two AACGTT motifs. Macrophages activated with CpG-modified pDNA secreted significantly more interleukin-12, tumor necrosis factor...

... modified pDNA that contained nucleotides scrambled to remove CpG motifs. Engineered CpG-pDNA or CpG-oligodeoxynucleotides should be useful as vaccines or adjuvants to promote the enhanced type 1 responses important...

11/3, K/5 (Item 5 from file: 5)
DIALOG(R) File 5: Biosis Previews(R)
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15665643 BIOSIS NO.: 200000383956
Synthetic oligodeoxynucleotides inhibit IgE induction in human lymphocytes
AUTHOR: Fujiwara Shigeharu (Reprint); Iho Sumiko; Kimura Yuiichi; Yamamoto Hiroyuki; Igawa Hideki; Saito Hitoshi
AUTHOR ADDRESS: Department of Otorhinolaryngology, Fukui Medical University, Shiomai-zuki, Matsuoka, Yoshida, Fukui, 910-1193, Japan**Japan
JOURNAL: American Journal of Respiratory and Critical Care Medicine 162 (1): p232-239 July, 2000 2000
MEDIUM print
ISSN: 1073-449X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

Synthetic oligodeoxynucleotides inhibit IgE induction in human lymphocytes

ABSTRACT: Synthetic oligodeoxynucleotides (ODNs) containing unmethylated CpG motifs have the capacity to stimulate T-helper (Th)1-type...
... the MPB-70 of Mycobacterium bovis Bacillus Calmette-Guerin. Two ODNs, containing CGT-ACG or AACGTT inhibited IgE production by human PBMC. When other oligonucleotides were substituted in a portion of the sequence of the core or flanking oligonucleotides in the ODN containing CGTACG, ODNs containing NACGTTG or A/CTCGTTG sequences specifically inhibited IgE...

DESCRIPTORS:
CHEMICALS & BIOCHEMICALS: ... synthetic oligodeoxynucleotide

11/3, K/6 (Item 6 from file: 5)
DIALOG(R) File 5: Biosis Previews(R)
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15386572 BIOSIS NO.: 200000104885

Modulation of host immune responses by protozoal DNA

AUTHOR: Brown Wendy C (Reprint); Suarez Carlos E; Shoda Lisa KM; Estes D Mark

AUTHOR ADDRESS: Department of Veterinary Microbiology and Pathology, Washington State University, Pullman, WA, 99164-7040, USA**USA

JOURNAL: Veterinary Immunology and Immunopathology 72 (1-2): p87-94 Dec. 15, 1999 1999

MEDIUM: print

ISSN: 0165-2427

DOCUMENT TYPE: Article; Literature Review

RECORD TYPE: Abstract

LANGUAGE: English

...ABSTRACT: murine B cells were identified in an 11 kb fragment of B. bovis DNA. An oligodeoxyribonucleotide containing one of these (AACGTT), located in the rhoptry associated protein-1 (rap-1) open reading frame, stimulated B cell...

11/3, K/7 (Item 7 from file: 5)

DIALOG(R) File 5: Biosis Previews(R)

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15331378 BIOSIS NO.: 200000049691

Influence of backbone chemistry on immune activation by synthetic oligonucleotides

AUTHOR: Pisetsky David S (Reprint); Reich Charles F III

AUTHOR ADDRESS: VA Medical Center, 508 Fulton St., Durham, NC, USA**USA

JOURNAL: Biochemical Pharmacology 58 (12): p1981-1988 Dec. 15, 1999 1999

MEDIUM: print

ISSN: 0006-2952

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

Influence of backbone chemistry on immune activation by synthetic oligonucleotides

...ABSTRACT: of backbone structure on these activities, we tested a series of synthetic phosphodiester and phosphorothioate oligonucleotides in in vitro cultures of murine spleen cells. These compounds were 30 bases long and consisted of either a single base or an immunostimulatory sequence (AACGTT) flanked on 5' and 3' ends by 12 nucleotides of each base. Cell activation was...

...and interleukin-12 was used as a measure of cytokine stimulation. In these assays, phosphorothioate oligonucleotides induced much higher levels of proliferation, CD69 expression, and cytokine production than the comparable phosphodiester...

...production was greatest with compounds with dA and dT flanks. Furthermore, while single base dG oligonucleotides stimulated proliferation as both phosphodiesters and phosphorothioates, they failed to stimulate cytokine production. Together, these findings indicate that base sequence as well as backbone chemistry influence immune activation by synthetic oligonucleotides, with the effects varying among responses. While suggesting differences in the structure-function relationships of...

DESCRIPTORS:

CHEMICALS & BIOCHEMICALS: ...synthetic oligonucleotides

11/3, K/8 (Item 8 from file: 5)
DI ALOG(R) File 5: Biosis Previews(R)
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15169085 BIOSIS NO.: 199900428745
The effect of CpG sequences on the B cell response to a viral glycoprotein encoded by a plasmid vector
AUTHOR: Pasquini S; Deng H; Reddy S T; Giles-Davis W; Ertl H C J (Reprint)
AUTHOR ADDRESS: Wstar Institute, 3601 Spruce Street, Philadelphia, PA, 19104, USA**USA
JOURNAL: Gene Therapy 6 (8): p1448-1455 Aug., 1999 1999
MEDIUM: print
ISSN: 0969-7128
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: the transgene product in mice. The antibody response could be rescued by concomitant injection of oligonucleotides carrying immunostimulatory sequences. The B cell response to two plasmid vectors, both expressing the same viral glycoprotein but containing a different content of the highly stimulatory AACGTT motif, was compared. Comparable B cell responses were induced to the two constructs given at ...

11/3, K/9 (Item 9 from file: 5)
DI ALOG(R) File 5: Biosis Previews(R)
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14989425 BIOSIS NO.: 199900249085
Mammalian granulocyte-macrophage colony-stimulating factor and some CpG motifs have an effect on the immunogenicity of DNA and subunit vaccines in fish
AUTHOR: Kanellos T S; Sylvester I D; Butler V L; Arbalí A G; Partidos C D; Hamblin A S; Russell P H (Reprint)
AUTHOR ADDRESS: Department of Pathology and Infectious Diseases, Royal Veterinary College, Royal College Street, London, NW1 0TY, UK**UK
JOURNAL: Immunology 96 (4): p507-510 April, 1999 1999
MEDIUM: print
ISSN: 0019-2805
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: A eukaryotic plasmid DNA carrying the AACGTT CpG motif in its ampR gene is a 'danger' signal for mice and caused an...

...no effect on antibody responses to beta-gal in either fish or mice. A synthetic oligonucleotide, which contains the GACGTT motif, potentiated antibody responses to co-administered beta-gal protein in...

11/3, K/10 (Item 10 from file: 5)
DI ALOG(R) File 5: Biosis Previews(R)
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14717222 BIOSIS NO.: 199800511469
DNA and a CpG oligonucleotide derived from Babesia bovis are mitogenic for bovine B cells
AUTHOR: Brown Wendy C (Reprint); Estes D Mark; Chantler Sue Ellen; Kegerreis Kimberly A; Suarez Carlos E

AUTHOR ADDRESS: Dep. Vet. Microbiol. Pathol., Washington State Univ.,
 Pullman, WA 99164-7040, USA**USA
 JOURNAL: Infection and Immunity 66 (11): p5423-5432 Nov., 1998 1998
 MEDIUM: print
 ISSN: 0019-9567
 DOCUMENT TYPE: Article
 RECORD TYPE: Abstract
 LANGUAGE: English

DNA and a QpG oligonucleotide derived from Babesia bovis are
 mitogenic for bovine B cells

...ABSTRACT: and several QpG hexameric sequences with known activity for
 murine B cells were identified. An oligodeoxynucleotide containing
 one of these ISS (AAGTT), which is present within the
 rhoptry-associated protein-1 (rap-1) open reading frame, was...

DESCRIPTORS:
 CHEMICALS & BIOCHEMICALS: QpG oligonucleotide;

11/3, K/11 (Item 11 from file: 5)
 DIALOG(R) File 5: Biosis Previews(R)
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14060235 BIOSIS NO.: 199799694295
 Immune stimulation-a class effect of phosphorothioate
 oligodeoxynucleotides in rodents
 AUTHOR: Monteith David K (Reprint); Henry Scott P; Howard Randy B; Flournoy
 Shin; Levin Arthur A; Bennett C Frank; Crooke Stanley T
 AUTHOR ADDRESS: Isis Pharmaceuticals, 2292 Faraday Ave., Carlsbad, CA
 92008, USA**USA
 JOURNAL: Anti-Cancer Drug Design 12 (5): p421-432 1997 1997
 ISSN: 0266-9536
 DOCUMENT TYPE: Article
 RECORD TYPE: Abstract
 LANGUAGE: English

Immune stimulation-a class effect of phosphorothioate
 oligodeoxynucleotides in rodents

ABSTRACT: Treatment of rodents with phosphorothioate
 oligodeoxynucleotides induces a form of immune stimulation
 characterized by splenomegaly, lymphoid hyperplasia,
 hypergammaglobulinemia and mixed mononuclear...
 ...a review of historical data and specific in vivo and in vitro studies.
 All phosphorothioate oligodeoxynucleotides evaluated induced
 splenomegaly and B-lymphocyte proliferation. Splenomegaly and
 B-lymphocyte proliferation increased with dose or concentration of
 oligodeoxynucleotide. Splenomegaly appeared to occur, at least in
 part, as a result of stimulation of B...
 ...proliferation. There were differences with respect to degree or potency
 of immune stimulation by different oligodeoxynucleotides. The rank
 order potencies for B-lymphocyte proliferation in vitro and splenomegaly
 correlated well for the oligodeoxynucleotides tested. Particular
 oligodeoxynucleotide sequence motifs or palindromes have been
 demonstrated to affect in vitro cell proliferation. Inclusion of a 5'-
 AAGTT-3' palindrome in a phosphorothioate
 oligodeoxynucleotide sequence significantly enhanced the potency.
 While inclusion of this palindrome or a QpG motif alone...

...palindromes and motifs were clearly not the sole factor required for

immune stimulation. Several phosphorothioate oligodeoxynucleotides that did not contain a CpG motif still induced immune stimulation in mice. The immune stimulation induced by phosphorothioate oligodeoxynucleotides was an effect on this class of compounds to which rodents are acutely sensitive.

DESCRIPTORS:

CHEMICALS & BIOCHEMICALS:

Miscellaneous Terms: ... PHOSPHOROTHIOATE OLIGODEOXYNUCLEOTIDES;

CONCEPT CODES:

? ds

| Set | Items | Description |
|-----|-------|-------------------|
| S1 | 53 | E1- E12 |
| S2 | 0 | S1 AND AACGTT |
| S3 | 491 | E1- E12 |
| S4 | 0 | S3 AND (AACGTT) |
| S5 | 0 | S3 AND CG |
| S6 | 227 | S3 AND CPG |
| S7 | 127 | RD (unique items) |
| S8 | 43 | E1- E12 |
| S9 | 0 | S8 AND AACGTT |
| S10 | 174 | AACGTT AND OLIG? |
| S11 | 38 | RD (unique items) |